

Docket No.: 00630/100M091-US1

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application	n of:
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Peter Bodine

Application No.: 10/666,851

Filed: September 19, 2003

For:

PHARMACEUTICAL COMPOSITIONS

AND METHODS OF USING SECRETED

FRIZZLED RELATED PROTEIN

Confirmation No.: 6790

Art Unit: N/A

Examiner: Not Yet Assigned

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)). Thus, it is believed no fee is due.

A copy of each document on the PTO/SB/08 is attached.

A concise explanation of relevance of the items listed on form PTO/SB/08 is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Dated: February 12, 2004

Respectfully submitted,

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PTO/SB/08a/b (08-03)
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Substitute for form 1449A/B/PTO		Complete if Known			
				Application Number	10/666,851-Conf. #6790
	NFORMATION	l DI	SCLOSURE	Filing Date	September 19, 2003
8	STATEMENT B	3Y /	APPLICANT	First Named Inventor	Peter Bodine
				Art Unit	N/A
	(Use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	00630/100M091-US1

		-	U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2</sup> ( if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

		FOREI	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code³-Number⁴-Kind Code⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	ВА	WO-98/16641-A1	04-23-1998	The Government of the United States of America (The Secretary, Department of Health and Human Services)		
	BB	WO-98/54325-A1	12-03-1998	The Government of the United States of America (The Secretary, Department of Hea		
	ВС	WO-95/02687-A1	01-26-1995	Mayo Foundation Education and Research		
	BD	WO-02/055547-A2	07-18-2002	The Government of the United States of America (The Secretary, Department of Health and Human Services), et al.		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	CA	Keming Lin, et al., "The cysteine-rich frizzled doman of Frzb-1 is required and sufficient for modulation of Wnt signaling", Proc. Natl. Acad. Sci., Vol. 94, October 1997, pp. 11196-11200.	
	СВ	Thomas Mayr, et al., "Fritz: a secreted frizzled-related protein that inhibits Wnt activity", Mechanisms of Development 63(1997), pp. 109-125.	
	СС	Bang Hoang, et al., "Primary Structure and Tissue Distribution of FRZB, a Novel Protein Related to Drosophila Frizzled, Suggest a Role in Skeletal Morphogenesis", The Journal of Biological Chemistry, Vol. 271, No. 42, October 18, 1996, pp. 26131-26137.	
	CD	Paul W. Finch, et al., "Purification and molecular cloning of a secreted, Frizzled-related antagonist of Wnt action", Proc. Natl. Acad. Sci., Vol. 94, June 1997, pp. 6770-6775.	
	CE	Randall T. Moon, et al., "Structurally Related Receptors and Antagonists Compete for Secreted Wnt Ligands", Cell, Vol. 88, March 1997, pp. 725-728.	
	CF	Amir Rattner, et al., "A family of secreted proteins contains homology to the cysteine-rich ligand-binding domain of frizzled receptors", Proc. Natl. Acad. Sci., Vol. 94, April 1997, pp. 2859-2863.	
	CG	Hovsep S. Melkonyan, et al., "SARPs: A family of secreted apoptosis-related proteins", Proc.	

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l s	TATEMENT I	3Y /	APPLICANT	First Named Inventor	Peter Bodine
				Art Unit	N/A
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Sheet	2	of.	2	Attorney Docket Number	00630/100M091-US1

	Natl. Acad. Sci., Vol. 94, December 1997, pp. 13636-13641.	
СН	Stavros C. Manolagas, "Birth and Death of Bone Cells: Basic Regulatory Mechanisms and Implications for the Pathogenesis and Treatment of Osteoporosis1", Endocrine Reviews 2000, 21(2), pp. 115-137.	
CI	Bodine, et al., J. Bone Miner. Res. 1996, 11:806-819.	_
CJ	Steven L. Teitelbaum, "Bone Resorption by Osteoclasts", Science, Vol. 289, September 2000, pp. 1504-1508.	
СК	David Goltzman, "Discoveries, Drugs and Skeletal Disorders", Nature Reviews, Vol. 1, October 2002, pp. 784-796.	
CL	Robert S. Weinstein and Mangolagas, "Apoptosis and Osteoporosis" The American Journal of Medicine, February 2000, Vol. 108, pp. 153-164.	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.